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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,099	07/21/2006	Helmut Kosslers	6281-00012/US/NP	4187

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EXAMINER

LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,099

Applicant(s)

KOSSLERS ET AL.

Examiner

Michael La Villa

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 8-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20051004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-7 and 17, in the reply filed on 10 August 2007 is acknowledged. The traversal is on the ground(s) that all groups are sufficiently related such that maintaining them in a single application would not constitute a serious examination burden. This is not found persuasive because a serious examination burden is evidenced by separate classification of the claim groups. The search and examination requirements of the nonelected claims are not coextensive with those of the elected claims.
2. The requirement is still deemed proper and is therefore made FINAL.
3. Claims 8-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10 August 2007.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.
5. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
6. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as,

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"The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because the Abstract appears to exceed 150 words. Correction is required. See MPEP § 608.01(b).
8. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

9. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:
 - (a) TITLE OF THE INVENTION.
 - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
 - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
 - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
 - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
 - (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
 - (g) BRIEF SUMMARY OF THE INVENTION.
 - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
 - (i) DETAILED DESCRIPTION OF THE INVENTION.
 - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
 - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
 - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

10. Claim 1 is objected to because of the following informalities: Regarding Claim 1, antepenultimate line, the comma following the word "wherein" is extraneous. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:
12. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
13. Claims 1-7 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
14. Regarding Claim 1, it is unclear what is meant by the phrase "preferably for use". It is unclear what is required by this preference. Is the strip to have the claimed intended use or not? Is this a strip that has been drawn and/or ironed?
15. Regarding Claim 2, it is unclear whether the claim coverage of the phrase "selected from the group of" is coextensive in scope with the phrase "selected from the group consisting of." It is unclear what is meant by the phrase "and/or additives an." Are the additives types of particles? Are they a separate type of electrically conductive material? Can they be alloying ingredients? Should the claim read "additives selected from the group consisting of"?
16. Regarding Claim 3, it is unclear what is meant by the phrase "serves as a metallic carrier material for the two layers." Are "the two layers" necessarily the nickel and cobalt layers? Is the carrier material necessarily the cold-rolled strip?

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17. Regarding Claim 4, it is unclear what is meant by the phrase "metallic carrier material." Is the carrier material necessarily the cold-rolled strip?
18. Regarding Claim 5, it is unclear what is meant by the phrase "it is also pre-coated after the application the diffusion annealed nickel layer." It is unclear what is referenced by "it". It is unclear how pre-coating is to be provided after application of nickel? Is this an additional coating layer to be applied before cobalt layer deposition? Does the requirement refer to provision of a pre-coating layer, prior to deposition of the nickel and cobalt layers and after diffusion of another nickel layer? It is unclear what is the antecedent basis of the "diffusion annealed nickel layer" as there is no previous mentioning of such a layer.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

20. A person shall be entitled to a patent unless –

21. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

22. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Junkers et al. USPN 4,901,096. Junkers et al. teaches coating a cold-rolled steel strip with nickel and cobalt, wherein the cobalt is formed without bright forming additives. See Junkers et al. (Abstract; col. 2, lines 11-51; col. 3, lines 14-44; col. 4, lines 20-64; col. 5, line 17 through col. 6, line 24). Junkers et al.'s nickel layer may be identified with the claimed "hard and brittle bright nickel layer" as these are relative terms that cannot serve as a basis for distinguishing a nickel layer

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having a measure of hardness, brittleness, and brightness. While Junkers et al. teaches diffusion treatment, this treatment is not precluded by the claims.

Moreover, the strip could be used for the claimed purposes prior to diffusion treatment.

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

25. Claims 1-7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sugikawa EP 0 809 307. Sugikawa teaches coating a nickel strike plated cold-rolled steel strip with nickel/cobalt and cobalt layers, wherein the nickel/cobalt and cobalt layers are formed without bright forming additives. The strip is intended to be used in making battery shells. See Sugikawa (Abstract; page 1, line 42 through page 3, line 29; page 5, lines 17-38; page 6, lines 35-50;

page 7, lines 33-39; page 8, lines 11-16; page 9, lines 1-16; page 10, lines 14-49; page 11, lines 4-24; and Claims 1-10). Sugikawa's strike nickel layer and/or nickel alloy layer may be identified with the claimed "hard and brittle bright nickel layer" as these are relative terms that cannot serve as a basis for distinguishing a nickel layer having a measure of hardness, brittleness, and brightness. When the strike layer is identified with the claimed nickel layer, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the nickel/cobalt layer of Sugikawa as Sugikawa teaches that effective laminates may be made with this layer applied to the strike layer. This nickel/cobalt layer is a cobalt alloy layer. Any strike layer would be expected to be of a thickness less than 2 microns. To the extent that the bath may be considered to contain brighteners, the claimed layer is not required to lack brightness in any particular manner, and so layers of the claimed structure and composition would be expected to encompass those of Sugikawa. When the Ni/Co layer is identified with the claimed nickel layer, Sugikawa teaches further applying a flash layer of low contact resistance layer made of Co, possibly when a nickel strike layer is present. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a thin Co layer to provide a low contact resistance outer layer in the presence or absence of nickel strike layer. The exemplified flash layer thickness of 0.05 microns meets the claimed thickness for this layer. Sugikawa teaches that the steel is conventional steel, which would be expected to meet the claimed carbon content requirement of Claim 3. Since the

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nickel/cobalt layer contains nickel, it may be considered a cobalt layer with nickel additive.

26. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugikawa EP 0 809 307 in view of Ohmura et al. USPN 6,270,922. Sugikawa is relied upon as above. In the event that Sugikawa does not exemplify steels of the claimed amount of carbon, Ohmura et al. teaches that conventional steels for battery shells are low carbon steels having the claimed carbon amounts. See Ohmura et al. (col. 4, lines 58-64 ; and col. 7, lines 25-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the laminate of Sugikawa with low carbon steel of Ohmura et al. as Ohmura et al. teaches that steels of low carbon are effective for making battery shells and as Sugikawa teaches a steel laminate for making a battery shell.

Conclusion


27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8900.

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29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa
29 September 2007


MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER